

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: METALUX

Report Number: P272035

Luminaire Tested: **22CZ2-34HE-S-UNV-L940-CD1-U**

Issue Date: 3/3/2020

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.

Test Information

Test Method: LM-79-08
Report Number: P272035
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-23)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-34HE-S-UNV-L940-CD1-U
Description: 2'X2' TROFFER LED MODULE,SMOOTH LENS, 90CRI
Light Source: (196) 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3050.0 lumens
Efficiency: N/A
Efficacy: 118.2 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.26 / 1.34
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

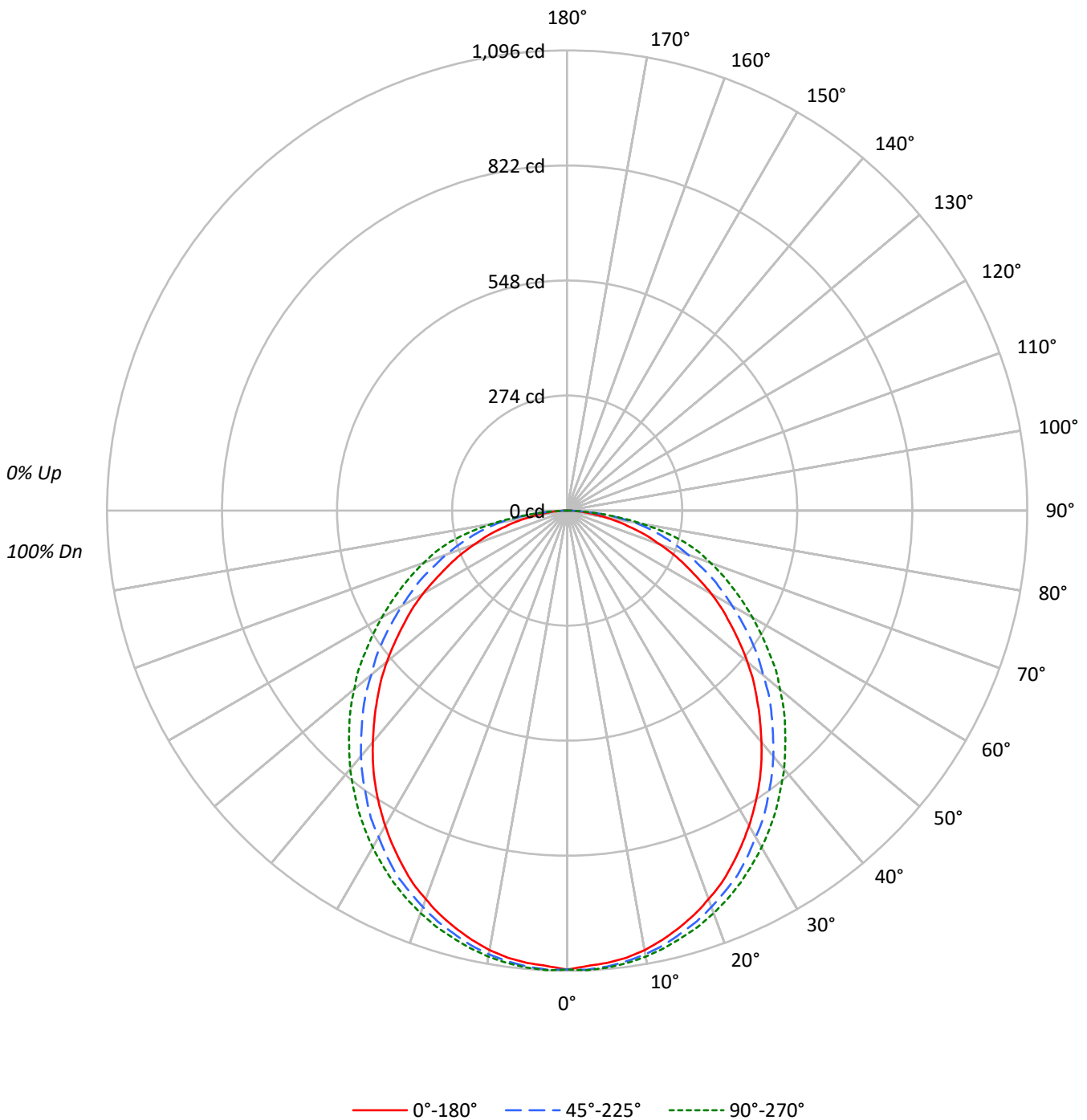
Input Watts (W): 25.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20			
RC	80				70				50				30				10	0		
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50	30	10	0
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102	102	102	100
1	108	103	99	95	106	101	97	94	97	94	91		93	90	88		89	87	85	83
2	98	90	83	77	96	88	82	76	84	79	74		81	77	73		78	74	71	69
3	90	79	71	64	87	77	70	63	74	68	62		72	66	61		69	64	60	58
4	82	70	61	54	80	69	60	54	66	59	53		64	57	52		61	56	52	49
5	75	62	53	47	73	61	53	46	59	52	46		57	51	45		55	50	45	43
6	70	56	47	41	68	55	47	41	53	46	40		52	45	40		50	44	39	37
7	65	51	42	36	63	50	42	36	49	41	36		47	40	35		46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32		43	37	32		42	36	31	30
9	56	43	35	29	55	42	34	29	41	34	29		40	33	29		39	33	28	27
10	53	40	32	26	51	39	31	26	38	31	26		37	31	26		36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2941	2941	2941
5°	2921	2945	2952
10°	2905	2932	2948
15°	2866	2906	2934
20°	2820	2877	2922
25°	2763	2848	2903
30°	2693	2790	2879
35°	2618	2739	2852
40°	2530	2684	2824
45°	2437	2621	2794
50°	2347	2550	2770
55°	2236	2503	2751
60°	2137	2443	2742
65°	1994	2429	2773
70°	1836	2408	2855
75°	1657	2441	3004
80°	1433	2514	2824
85°	1186	2109	2109



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	103.4	3.4
10°-20°	294.1	9.6
20°-30°	440.1	14.4
30°-40°	521.2	17.1
40°-50°	531.1	17.4
50°-60°	476.0	15.6
60°-70°	372.7	12.2
70°-80°	240.3	7.9
80°-90°	71.0	2.3
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	837.6	27.5
0°-40°	1358.8	44.5
0°-60°	2366.0	77.6
0°-90°	3050.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3050.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1093	1093	1093	1093	1093	
5°	1082	1084	1090	1092	1093	103
15°	1029	1035	1043	1052	1053	290
25°	931	939	959	972	978	428
35°	797	807	834	860	868	498
45°	640	655	689	724	734	495
55°	477	492	534	571	586	427
65°	313	332	381	418	436	311
75°	159	184	235	275	289	171
85°	38	53	68	68	68	45
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1092.9	1092.9	1092.9	1092.9	1092.9
2.5°	1085.8	1088.6	1094.3	1095.8	1095.8
5°	1081.5	1084.4	1090.1	1091.5	1092.9
7.5°	1074.4	1075.8	1082.9	1085.8	1087.2
10°	1063.0	1065.9	1073.0	1077.3	1078.7
12.5°	1047.4	1051.6	1060.2	1065.9	1067.3
15°	1028.9	1034.6	1043.1	1051.6	1053.1
17.5°	1008.9	1014.6	1026.0	1036.0	1038.8
20°	984.8	991.9	1004.7	1016.1	1020.3
22.5°	960.6	966.3	981.9	996.1	1000.4
25°	930.7	939.2	959.1	971.9	977.6
27.5°	899.4	909.3	929.3	946.3	952.0
30°	866.6	876.6	898.0	919.3	926.4
32.5°	832.5	843.9	869.5	890.8	898.0
35°	796.9	806.9	833.9	859.5	868.1
37.5°	759.9	768.5	799.8	826.8	835.3
40°	720.1	731.5	764.2	795.5	804.0
42.5°	680.2	693.0	725.8	759.9	768.5
45°	640.4	654.6	688.8	724.3	734.3
47.5°	602.0	613.3	651.8	685.9	700.1
50°	560.7	572.1	609.1	647.5	661.7
52.5°	518.0	533.6	573.5	610.5	627.6
55°	476.7	492.4	533.6	570.6	586.3
57.5°	438.3	451.1	493.8	532.2	547.9
60°	397.0	408.4	454.0	495.2	509.5
62.5°	352.9	370.0	417.0	455.4	472.5
65°	313.1	331.6	381.4	418.4	435.5
67.5°	276.1	293.2	341.5	381.4	399.9
70°	233.4	256.2	306.0	345.8	362.9
72.5°	199.2	219.2	270.4	310.2	328.7
75°	159.4	183.6	234.8	274.7	288.9
77.5°	126.7	150.8	199.2	230.5	237.7
80°	92.5	116.7	162.2	177.9	182.2
82.5°	62.6	85.4	116.7	121.0	122.4
85°	38.4	52.7	68.3	68.3	68.3
87.5°	18.5	21.3	24.2	22.8	22.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)